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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,271	07/10/2003	Tatsuya Ishitobi	16869S-085200US	4844

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EXAMINER

GOMA, TAWFIK A

ART UNIT PAPER NUMBER

2627

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/618,271	ISHITOBI ET AL.	
	Examiner	Art Unit	
	Tawfik Goma	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on 6/16/2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Frank (US Patent 6208602).

Regarding claim 1, Frank discloses a method for a disk device of authenticating disk management information of a disk to certify validity of management information recorded on the disk (col. 8 lines 27-29), comprising initiating stop-processing (col. 8 lines 47-51); and subsequent to initiating stop-processing recording authentication information on the disk on which the management information (col. 8 lines 12-15) is recorded (col. 8 lines 37-38 and lines 43-47)), the authentication information confirming validity of the management information (col. 8 lines 39-47).

Regarding claim 2, Frank discloses a method in a disk device for authenticating disk management information of a disk to certify validity of management information recorded on the disk (col. 8 lines 37-39), comprising the steps of: recording authentication information (status info./validity info col. 8) on the disk on which the management information is recorded (col. 8 lines 12-

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14), thereby certifying that the management information is valid (col. 8 lines 43-47); and recording invalidating information on the disk on which the management information and the authentication information are recorded (col. 8 lines 47-51), thereby invalidating certifying effect of the authentication information (col. 8 lines 47-51).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank (US 6208602) in view of Bakx (US 5226027).

Regarding claim 3, Frank discloses a method of authenticating disk management information of a disk using a disk device to certify validity of management information recorded on the disk (col. 8) comprising the steps of: recording, during stopping processing of a disk device in which the disk is loaded (col. 8 lines 47-51 and lines 51-55), authentication information on the disk if validity of the management information is confirmed (col. 8 lines 37-38 and 43-47). Frank fails to disclose wherein the authentication information is recorded in a PCA area of the disk. Frank discloses wherein the status info and the validity information of the status info are recorded on either an inner periphery or outer periphery of a disc (col. Col. 8 lines 15-21). In the same field

of endeavor, Bakx discloses recording a PCA area on an inner periphery of a disc (fig. 2). It would have been obvious to one of ordinary skill in the art to modify the method disclosed by Frank by recording the authentication information in what would be the PCA area disclosed by Bakx. The rationale is as follows: One of ordinary skill in the art would at the time of the applicant's invention would have been motivated to provide a PCA area on an inner periphery of a disc in order to perform power calibration of the recording laser prior to a recording operation.

Regarding claim 4, Frank further discloses the steps of: sequentially and additionally recording authentication information and invalidating information on the disk (col. 8 lines 27-66); regarding the management information on the disk as valid if invalidating information is absent after authentication information last recorded on the disk (col. 8 lines 43-47); and regarding the management information on the disk as invalid if invalidating information is present after authentication information last recorded on the disk (col. 8 lines 47-51).

Regarding claim 6, Frank discloses means for recording authentication information to certify validity of management information in a recording management area on a disk (col. 4 lines 56-67) and invalidating information to invalidate certifying effect of the authentication information (col. 8 lines 27-65) on the disk on which the management information is recorded; and means for determining whether or not the management information on the disk is valid by confirming the authentication information and the invalidating information on the disk (col. 8 lines 27-29). Frank fails to disclose wherein the authentication

information is recorded in a PCA area of a disc. Bakx discloses providing a PCA area on an inner periphery of a disc. The rationale for combining Frank and Bakx follows as in claim 3 above.

Regarding claim 7, Frank further discloses the authentication information is recorded, during the time that stopping processing of the disk device (col. 8 lines 47-55), if validity of the management information is confirmed (col. 8 lines 27-29 and 37-38); and the invalidating information is recorded, before data recording processing, in response to a data recording request first received after the disk device is started (col. 8 lines 39-44).

Regarding claim 8, Frank further discloses wherein the authentication information (status/validating info. Col. 8 lines 12-15 and 37-39) is a copy of the disk management information (use info, col. 8 lines 12-15), and if the information last recorded in the power calibration area is the same as the disk management information, then the disk management information is deemed to be valid (col. 8 lines 27-32).

Response to Arguments

Applicant's arguments filed 6/16/2006 have been fully considered but they are not persuasive.

Regarding applicant's arguments with respect to "initiating stop-processing...", Frank discloses the circumstance wherein an interruption or a disc removal occurs (col. 8 lines 47-51), and the process that follows with respect to recording authentication information or validation information. After the disc is interrupted, Frank discloses that validity information is recorded that indicates

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that the status information is incomplete (col. 8 lines 49-51) and that after the disc device is restarted it writes validity information along with status information indicating that the status information is valid (col. 8 lines 51-55). Frank also discloses that invalidity information is recorded prior to a first record procedure (col. 8 lines 39-43), which also reads on the limitation "during startup processing."

Regarding applicant's arguments that Frank fails to teach "invalidating information," this argument is not persuasive because the combination of status information and validity information reads on the claimed "authentication information and invalidating information." Frank's validity information is used both to confirm validity of the status information (authentication info.), and also to invalidate the status information (col. 8 lines 39-47).

Regarding applicant's arguments with respect to claim 3, the arguments are moot in view of the new grounds of rejection. Furthermore, Frank does disclose that the status information and the corresponding validity information can be recorded in an area preceding the lead-in area (col. 8 lines 15-21)

Allowable Subject Matter

Claim 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 5 is allowable over the prior art of record because the prior art of record including closest US Patent Frank (US 6208602) and Bakx (US 5226027), considered individually or in combination fail to disclose or fairly teach a method of authenticating disk management information including the combination wherein if the last recorded power calibration pattern in the power calibration area is a test pattern, then the disk management information is deemed to be invalid.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will


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the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


T. Goma
8/24/2006


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